



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

## ZOOLOGY.

**The Influence of changed Environment on Mollusca.—**

The experiments made by Professor Semper with specimens of snails in order to ascertain the causes of dwarfing have recently been repeated by M. H. de Varigny who arrives at somewhat different conclusions from those of Prof. Semper. The experiments consisted in isolating young individuals from the same mass of ova in vessels containing different amounts of water, but placed under the same conditions of food, temperature and light. It was found that the size of the individual varies with the volume of water, and Dr. Semper's conclusion is that there is present some substance, as yet unknown, was necessary to the growth of the snail. M. de Varigny observed that while the size does vary with the volume of water, the dimensions vary more with amount of water surface than with volume alone, and increase in size persists when the superficies was increased while the volume was diminished. M. de Varigny suggests that dwarfing is due to lack of room in which to move about. (Journ. del 'Anatomie et de la Physiologie, 1894.)

**The genus *Leptophidium*.—**In 1863 I established the genus *Leptophidium* for ophidiids having a slender form and regularly embricated scales. Having had occasion recently to refer to Hallowell's "Report upon the Reptilia of the North Pacific Exploring Expedition" (Proc. Acad. Nat. Sc. Phila., 1860) I found that he had used the same name previously for a genus of snakes. After endeavoring in vain to identify Dr. Hallowell's genus, I asked Dr. Stejneger and he informed me that he had also vainly attempted to identify the same snake and that no specimens answering to Hallowell's diagnosis were in the National Museum. Prof. Cope has not mentioned the name as that of a valid genus or as a synonym in his Catalogue of Genera of Snakes. (Bull. U. S. Nat. Mus., no. 32, 1887).

But, whatever, may be ascertained to be the value of Hallowell's genus, there is no doubt that *Leptophidium* cannot be retained as the name of the Ophidioid genus. *Lepophidium* (scale, and *Ophidium*) may be given as a substitute and to recall the regular squamation characteristic of the genus.

*Lepophidium* has proved to be one of great interest and to be represented by a number of species in moderately deep seas. In addition to (1) *L. profundorum* and (2) *L. brevibarbe*, the following were described

by Jordan and Bollman (1889) and Goode and Bean. (Proc. U. S. Nat. Mus., 1890, pp. 108-110).

3. *Lepophidium prorates*.
4. *Lepophidium pardale*, 29 fathoms.
5. *Lepophidium microlepis*, 76 fathoms.
6. *Lepophidium stigmatistium*, 112 fathoms.
7. *Lepophidium emmelas*, 306-362 fathoms.

It will be for the future to determine whether these species are characteristic of different horizons or whether they inhabit indifferently various depths.

THEO. GILL.

**The Habitat of the Salamander *Lingulapsus annulatus* Cope.**—A single specimen only of unknown habitat has hitherto represented this species in the U. S. National Museum. It is, therefore, of interest that we are able to describe a second specimen as identified by Dr. L. Stejneger from Hot Springs, Arkansas. The specimen is 165 mm. in total length with a comparatively long tail as compared with any of the *Amblystomæ* we have seen. The specimen is still in Dr. Stejneger's hands, so we cannot give an exact description of it, but we observed the following facts with regard to it as compared with the description of the type in your "*Batrachia of North America*." The general color was brown above, crossed by narrow bands of gray, and paler below, the first gray band was between the orbits, the second on the occiput, the third on the shoulders; between the shoulder and rump there were one or two less bands than in the type, those on the tail we did not count, two of the bands on the tail united on one side forming a loop.

The head seemed small and the body bulky compared with any other salamanders we have seen. The fore and hind limbs when appressed to the sides were separated by 3 and parts of 2 other costal interspaces as in the type. Taken at Hot Springs, Ark., Nov. 1, 1894.

—H. H. & C. S. BRIMLEY.

**The White Headed Eagle in Northern Ohio.**—The White Headed Eagle is a resident bird on the peninsula that bounds Sandusky Bay on the north. For more than fifty years there has been a nest on the farm now owned by Mrs. Lammers, about half a mile north of the Danbury Post-Office. The present one has stood only nine years but it was made from the material of another belonging to the same pair

of birds and removed by them to the tree it now occupies after the one which held their old nest had been blown down. Both birds rarely if ever leave their nest at the same time in the course of the whole year. While one goes to the bay for fish the other remains at the nest or at least in the same small piece of woods awaiting the return of her mate or sometimes starting out when she sees him coming. No wonder they feel some solicitude for the home where they have reared so many broods of young and where their abode has been winter and summer for so many years. Occasionally they are visited by a third whom we may suppose to be one of their grown up children returning after long absence to his parents for advice. At any rate he is so well received that he is apt to stay several months.

At this nest two new eaglets, or sometimes only one, are reared each year, but they wander far away from home before they are old enough to find mates and start a new family, for these are only one or two new nests within many miles around. There is another old one about three miles east of this, not far from Piccolo station; another between Port Clinton and Peachton, and one 26 or 27 years old on Kelly's Island. There is also one nest on Put-in-Bay, one on Middle Bass, on North Bass and on Sugar Island. So far as I can learn all the nests are believed by the people that live near them to have been occupied continuously by the same pair of birds for many years. At each nest one bird remains while the other goes in search of food. The pair on Kelly's Island commenced a new nest, near their old one, about two years ago, and have worked on it a number of times since, but have not yet used it. They are supposed to be getting ready to move, on account of the tree containing the old nest being dead. Most of the nests are about 50 feet from the ground and appear to be five or six feet high and four or five across. The birds raise only one brood a year, and rarely, if ever, more than two in a brood, but these two they usually succeed in bringing up, and as eagles are rarely killed in this region, many that are raised here must go elsewhere to live. Quite likely they go farther north, yet it would seem as if the American Eagle were disinclined to make a permanent home beyond the limits of the republic that has adopted it. Perhaps the freezing of the Canadian streams and lakes from which they draw their supply of fish in mild weather drives them south to the Great Lakes. At any rate there are many more eagles on the peninsula in winter than in summer. Two years ago more than fifty were seen at one time on the ice covering what

is called the west harbor, and about seventy-five on the east harbor, feeding on the fish offal thrown away by the fishermen. As the majority of these winter visitors lack the white on head and tail that characterizes the old birds it may be that they are birds that have not mated or built nests.

The eagles at all times of the year subsist on fish, eating but little else. They take them alive from the water and dead from the shore, and here as well as on the Atlantic coast they occasionally take them from the osprey. When an eagle captures a live fish it is sometimes pursued by another eagle which succeeds after a spirited struggle in getting it away. Among the farmers they are not considered beneficial nor very harmful, though they occasionally take tame ducks and, it is said, lambs. On Kelly's Island and Put-in-Bay they are less numerous than formerly, but on the peninsula the number is increasing.

—E. L. MOSELEY.

**The Paludicolæ.**—Dr. Shufeldt offers the following scheme to show the divisions of the suborder, Paludicolæ, of the United States :

Suborder.	Superfamilies.	Families.	Genera.
Paludicolæ {	Gruoidea	{ Gruidae, Aramidae,	Grus. Aramus.
	Ralloidea	Rallidae	{ Rallus. Crex. Porzana. Ionornis. Gallinula. Fulica.

In regard to the connection of the Paludicolæ with other avian groups, the author notes that the Jacanidae link this suborder with the Limicolæ, through certain species in the Plover-Sandpiper line; Podica and Heliornis lead towards the Pygopodes; and such ancestral types as Chionis connect them with the Longipennes; by various links they are connected also with the Herodiones, through Rhinochetus and Eurypyga.

Professor Fürbringer believes that the Apteryges are far more closely related to the Rallidae than has been, heretofore, realized. If this be true, it forms a line toward the Struthious types—with all the Gallinae likewise only a little more remotely related. (Proceeds. Zool. Soc. London, March, 1894.)

**Mexican Glires.**—In studying the series of Mexican Rodents collected by Mr. E. W. Nelson, Dr. C. H. Merriam finds that a wood rat described by him sometime ago under the name *Neotoma alleni* represents a new genus for which he proposes the name *Hodomys*. This genus is characterized by having the crown of the last molar shaped like the letter S, and also by important cranial distinctions.

Associated with *Hodomys*, by reason of dental characters are *Ptyssophorus*, *Tretomys* (both fossil) *Xenomys* and *Neotoma*. These five genera form a group presenting, according to Dr. Merriam, nearly every important step in the evolution of the modern genus *Neotoma* from the Cricetine series, *Ptyssophorus* is the more primitive type; *Tretomys* and *Hodomys* seem to represent more advanced stages in the evolution of the group, while *Xenomys* and *Neotoma* are more specialized.

The five genera above enumerated are classed together by the author, as a subfamily, the Neotominae, and it seems to be an independent offshoot, as is also the Arvicolinae, from the half-tuberculate crowned Cricetinae.

Dr. Merriam redefines the genera *Ptyssophorus* and *Tretomys*, and characterizes the new genus *Hodomys* with reference to the more specialized genera *Xenomys* and *Neotoma*, and adds descriptions of all the known species. (Proceeds. Phila. Acad. Nat. Sci., Sept., 1894.)

**Zoological News,—Spongiæ.**—In a paper on the anatomy and relationships of *Lelapia australis*, Mr. Arthur Dendy calls attention to the peculiar reticulated fibrous character of the skeleton, which has previously escaped notice. This character is unknown in any other living calcareous sponge, while it forms a prominent feature in the fossil group Pharetrones of Zittel. The author accordingly regards *Lelapia australis* as a living representative of Pharetrones which family must now be classed with recent Calcareæ. (Quart. Journ. Micros. Sci. June, 1894.)

**Pisces.**—A new species of Ribbon Fish, *Trachipterus rex-salmonorum* is described and figured by Dr. Jordan and Prof. Gilbert. According to the authors, this species bears some resemblance to *L. altivelis* described by Kner from Valparaiso. The latter species has, however, the nuchal crest much lower and farther back, the first dorsal and the ventrals much lower, the second dorsal fin higher, the skin rougher, the four black spots different in size and position from those found in *T. rex-salmonorum*, and the caudal rays divided near the base.

The type of the new species was obtained in the open sea outside the bay of San Francisco. (Proceeds. Cal. Acad. Sci. Ser. 2, Vol. IV, 1894.)

**Reptilia.**—In the Proceedings of the Rochester Academy of Sciences Vol. II, 1892 is published a paper, by F. W. Warner, on the Ophidians of the Southern States which contains numerous inaccuracies, and which should have been excluded or corrected by the editors of that volume.

**Aves.**—In a paper entitled "The Origin of certain North American Birds as Determined by their Routes of Migration," Dr. Chapman points out that the Bobolinks which nest west of the Rocky Mts. do not migrate southward with the birds of the Western Province, but retrace their steps and leave the United States by way of Florida, thus furnishing evidence of gradual extension of range westward and of the stability of routes of migration. (Abstr. Proceeds. Linn. Soc. New York, 1893-94.)

**Mammalia.**—The three complete skeletons and two skulls of Porpoises collected by Dr. Abbot during his recent cruise among islands north of Madagascar are identified by Mr. F. W. True with *Prodelphinus attenuatus* Gray. Dr. Abbot's notes concerning these specimens include a description of the coloration of each animal when captured so that it is now possible to correlate the external characters with those of the skeleton of this genus. (Proceeds. U. S. Natl. Mus., Vol. xvii, 1894.)

Professor J. T. Wilson regards the dumb-bell-shaped bone in *Ornithorhynchus* as a true "anterior vomer" formed by the fusion of bilaterally symmetrical halves; and both in its nasal and in its palatine relations it resembles the palatine lobe of the vomer in the alligator *Caiman niger*. (Proceeds Linn. Soc. N. S. W., March, 1894.)

A collection of Mammals from the Island of Trinidad referred to Dr. J. A. Allen and Prof. Chapman for identification adds one species to the list of Bats of that Island, raises the number of known Trinidad Rodents from 7 to 19, and of indigenous Muridae from one to eight, six of which are described as new. (Bull. Am. Mus. Nat. Hist., Vol. V, 1893.)

After a critical survey of the dental and cranial characters of *Ursus cinnamomeus*, *U. arctos*, *U. horribilis* and *U. americanus* Mr. A. E. Brown reaches the conclusion expressed some years ago by J. A. Allen,

but subsequently abandoned by him, viz. : that leaving out *maritimus*, none of the North American bears can be accorded a higher rank than that of subspecies of *arctos*. This conclusion was reached after a full study of specimens of skins and skeletons preserved in the museums of America and Europe. (Proceeds. Phila. Acad. 1894.)

Eight new Pocket-Mice, described by Dr. Merriam are commented on as follows by the author.

"*P. baileyi* is a type very different from any heretofore described. It is a large animal with a peculiar skull, which suggests affinities with *P. paradoxus* on one hand, and with *P. formosus* on the other, though much nearer the latter than the former. *P. columbianus* is a peculiar local form of the *olivaceus* group. *P. nevadensis*, *P. panamintinus* and *P. mexicanus* are small forms with much swollen mastoids, belonging to the *flavus-longimembris* group. *P. nelsonii*, *P. stephensii* and *P. canescens* belong to the *penicillatus* group of the subgenus *Chaetodipus*." (Proceeds. Phila. Acad. Nat. Sci., 1894.)